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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/685,479	10/16/2003	Sean Colbath	02-4033	5448

7590 02/05/2007  
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EXAMINER
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PYO, MONICA M

ART UNIT	PAPER NUMBER
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2161

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/05/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/685,479	<b>Applicant(s)</b> COLBATH ET AL.	
	<b>Examiner</b> Monica M. Pyo	<b>Art Unit</b> 2161	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 20 Novembre 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 and 16-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>1/20/04, 1/8/07</u> . | 6) <input type="checkbox"/> Other: _____  |

***DETAILED ACTION***

1. This communication is responsive to the Amendment filed on 11/20/2006.
2. Claims 1-19 are currently pending in this application. Claims 1, 9, 16 and 18 are independent claims. In the Amendment filed 11/20/2006, claims 18-19 are amended.
3. Claims 12-15 were withdrawn and Claims 1-11 and 16-19 are rejected. This action is made Final.

***Information Disclosure Statement***

4. The information disclosure statement (IDS) submitted on 1/8/2007 was filed and being considered by the Examiner.

Two NPL documents (by Scott Shepard et al. and Daben Liu et al.) were filed on 11/20/2006 and being considered by the Examiner.

***Drawings***

5. Applicant's explanation regarding the Drawing objections made in a prior Office Action are persuasive. Therefore, the Drawing objections made in a prior Office Action are withdrawn.

***Claim Rejections - 35 USC § 112***

6. The amendment to claims has been received on 11/20/2006. The changes are accepted and therefore, the 35 U.S.C. 112, 2<sup>nd</sup> paragraph rejections made in a prior Office Action are withdrawn.

***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1-3, 9 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Non Patent Literature "Spoken Documents: Creating Searchable Archives from Continuous Audio", published by System Sciences, 2000, January 4-7, 2000, pp. 9, written by Kubala et al. (hereafter Kubala).

Regarding Claims 1 and 9, Kubala disclose a method of creating labels for clusters of documents, comprising:

- A). **identifying topics associated with the documents in the clusters**, as the speaker identification system creates paragraph-like units and clusters them (Kubala: col. 5, lns. 19-30; col. 6, lns. 10-25; col. 8, lns. 11-16);
- B). **determining whether the topics are associated with at least half of the documents in the clusters**, as three out of five search results contain highly similar topics for the cluster group <i.e., 'Smoking and FDA'> (Kubala: col. 14, lns. 1-26);
- C). **adding ones of the topics that are associated with at least half of the documents in the clusters to cluster lists**, as to add more topics for the topic classifier (Kubala: col. 8, lns. 11-16; col.14, lns. 29-col. 15, lns. 25); and
- D). **forming labels for the clusters from the cluster lists**, as a new identification of new topics for the topic classifier (Kubala: col. 15, lns. 27-37).

Regarding Claim 2, Kubula discloses the method wherein the identifying topics includes: using a probabilistic Hidden Markov Model to determine the topics (Kubula: col. 6, lns. 10-25).

Regarding Claim 3, Kubula discloses the method wherein the forming labels includes: ranking the ones of the topics (Kubula: col. 6, lns. 37-49), and placing the ones of the topics in the labels in ranked order (Kubula: col. 7, lns. 18-26; col. 8, lns. 1-9).

Regarding Claim 16, Kubula discloses a topic detection system, comprising:  
**a decision engine configured to, as a Rough'n'Ready system (Kubula: col. 4, lns. 37-44):**

- A). receive a plurality of documents, as a large quantity of documents**  
(Kubula: col. 9, lns. 46-51; col. 10, lns. 1-2), and
- B). group the documents into a plurality of clusters, as different titles given for topic groups (Kubula: col. 5, lns. 19-30; col. 10, lns. 3-18); and**  
**a label engine configured to:**
  - C). identify topics associated with the documents in the clusters, as an**  
Identifinder name-entity extraction system (Kubala: col. 6, lns. 10-25; col. 8, lns. 11-16);,
  - D). determine whether the topics are associated with at least half of the documents in the clusters, as three out of five search results contain highly similar topics for the cluster group <i.e., 'Smoking and FDA'> (Kubula: col. 14, lns. 1-26); and**

**E). form labels for the clusters using ones of the topics that are associated with at least half of the documents in the clusters, as a new identification of a new topics for the topic classifier (Kubala: col. 15, lns. 27-37).**

***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 4-8, 10-11 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kubula, in view of U.S. Patent No, 5,963,940 issued to Liddy (hereafter Liddy).

Regarding Claims 4 and 10, Kubula disclose the method wherein the ranking the ones of the topics includes:

    ranks to the ones of the topics based on a number of the documents with which the ones of the topics are associated (Kubula: col. 14, lns. 8-26).

Kubula does not explicitly disclose: assigning ranks.

However, Liddy discloses: assigning ranks (Liddy: col. 21, lns. 28-52).

It would have been obvious to a person with ordinary skill in the art at the time of invention to incorporate the Liddy's teaching of assigning ranks in the IdentiFinder system of Kubula. Skilled artisan would have been motivated to combine the Liddy's method of assigning

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ranks in the Kubula's teaching of utilizing an Identifinder system to be able to assign ranks to be able to utilize a ranking list and to better find the similarity (Liddy: col. 2, lns. 58-63).

Regarding Claims 5 and 17, Kubula and Liddy disclose the method further comprising:  
ranking the ones of the topics based on a number of the documents with which the ones of the topics are associated (Kubula: col. 7, lns. 7-15; col. 14, lns. 8-26) and (Liddy: col. 24, lns. 56-67; col. 25, lns. 1-2).

Regarding Claim 6, Kubula and Liddy disclose the method wherein when a first one of the ones of the topics, as a first topic, is associated with a majority of the documents in one of the clusters and a second one of the ones of the topics, as a second topic, is associated with less than the majority of the documents in the one of the clusters, the first topic is ranked higher than the second topic (Kubula: col. 14, lns. 8-26) and (Liddy: col. 21, lns. 59-67).

Regarding Claim 7, Kubula and Liddy disclose the method wherein the ranking the ones of the topics includes: assigning higher ranks to first ones of the ones of the topics that are associated with larger numbers of the documents than second ones of the ones of the topics that are associated with smaller numbers of the documents (Kubula: col. 6, lns. 42-49) and (Liddy: col. 33, lns. 4-8, 11-26 and 65-67; col. 34, lns. 1-9).

Regarding Claim 8, Kubula and Liddy disclose the method wherein the forming labels includes:

sorting the cluster lists based on the rankings of the ones of the topics (Liddy: col. 3, lns. 42-48).

Regarding Claim 11, Kubula and Liddy disclose the system wherein the means for generating a label includes:

means for sorting the one or more of the topics based on the ranking to form the label for the cluster (Liddy: col. 3, lns. 42-48; col. 25, lns. 34-41).

11. Claims 18-19 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Kubala.

Regarding Claim 18, Kubula discloses a method for creating labels for clusters of documents, comprising:

**A). identifying topics associated with the documents in the clusters**, as the speaker identification system creates paragraph-like units and clusters them (Kubala: col. 5, lns. 19-30; col. 6, lns. 10-25; col. 8, lns. 11-16);

**B). determining whether the topics are associated with at least a predetermined number of the documents in the clusters**, as three out of five search results contain highly similar topics for the cluster group <i.e., 'Smoking and FDA'> (Kubula: col. 14, lns. 1-26); and

**C). generating labels for the clusters using ones of the topics that are associated with the at least a predetermined number of the documents in the clusters**, as a new identification of new topics for the topic classifier (Kubula: col. 8, lns. 11-16; col.14, lns. 8-col. 15, lns. 37).



It would have been obvious to a person with ordinary skill in the art at the time of invention to consider the Kubula's teaching of 100 speaker populations out of 170 populations (in col. 5, lns. 34-48) as a predetermined portion. Skilled artisan would have been motivated to utilize the Kubula's teaching to exemplify a speaker population number as a "document portion" to enhance the query performance and result with a proficient outcome.

Regarding Claim 19, Kubula discloses the method wherein the predetermined number of the documents is equal to approximately half of the documents (Kubula: col. 14, lns. 1-26).

***Response to Arguments***

12. Applicant's arguments filed 11/20/2006 have been fully considered but they are not persuasive.

In regarding applicant's argument of the feature of "identifying topics associated with the documents in the clusters", it should be noted that Kubula discloses the speaker identification and segmentation system creating paragraph-like units between speakers and clustering archived files with a unique name. Thus, the Kubula's teaching of processing a clustered archived files with unique names is valid to read on the broadly claimed limitation of "identifying topics associated with the documents in the clusters" in col. 5, lns. 19-30, col. 6, lns. 10-25 and in col. 8, lns. 11-16.

Applicant argues that Kubula does not disclose the feature of "determining whether identified topics are associated with at least half of the documents in the clusters." However, the Examiner disagrees. As stated in the above rejections, Kubula discloses the feature of

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determining identified topics (the 'Smoking and FDA' topic in three out of five stories) in col. 14, lns. 1-26.

Applicant also argue that Kubula does not disclose the feature of "forming labels for the clusters from cluster lists that include topics that are associated with at least half of the documents in eh clusters." However, as explained above, Kubula discloses the feature of properly name tagging and identifying new topics for the topic classifier in col. 8, lns. 11-16 and col. 15, lns. 27-37.

Applicant argues that neither Kubula nor Liddy disclose the "assigning ranks...the documents with which the ones of the topics are associated" features of claim 4 and the "ranking the ones of the topics.... The ones of the topics are associated" features of claim 5. However, it should be noted that the rejections regarding theses claims are made under 35 U.S.C. 103(a) and the test for obviousness is whether the combined teaching of the references would have suggested the combination to one of ordinary skill in the art. As stated in the above rejections, Kubula in view of Liddy disclose the feature of assigning ranks the topics (i.e., second ranked story from the Boolean query) on a number of the documents with associated topics in col. 14, lsn. 8-26 of Kubula and in col. 21, lns. 28-52 of Liddy. Although Kubula does not explicitly disclose all of the claimed limitations, the feature not disclosed by Kubula is disclosed by Liddy. One can not show non-obviousness by attacking references individually where, as here, the rejection is based on a combination of references.

Applicant argues that Kubula does not disclose the "determining whether identified topics are associated with at least a predetermined number of the documents in the clusters"

features of claim 18. Again, the Examiner suggests reading the above response in regarding the “determining identified topics” argument.

***Conclusion***

13. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Monica M. Pyo whose telephone number is 571-272-8192. The examiner can normally be reached on Mon-Fri 6:30 - 3:00.


If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, Apu Mofiz can be reached on 571-272-4080. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

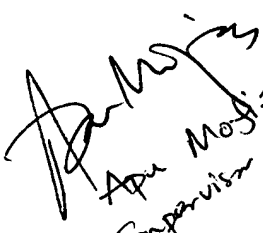
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Monica M Pyo  
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1/29/2007

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